

March 10, 2020

US Environmental Protection Agency, R10 c/o Ken Marcy, National Priorities List Coordinator 805 SW Broadway, Suite 500 Portland, OR 97205

RE: Bradford Island – Yakama Use, Treaty Rights, and Health Concerns

Dear Mr. Marcy:

The Bradford Island area is within the homelands of the Confederated Tribes and Bands of the Yakama Nation (Yakama Nation). This Island and this vicinity remain as an important usual and accustomed (U&A) area for cultural, subsistence and commercial fishing. The consumption of resident fish and the resulting exposure to Bradford Island contamination is highly concerning.

The Yakama Nation repeatedly raised concerns about the adequacy and lack of cleanup progress at Bradford Island and therefore petitioned EPA for listing on the National Priorities List (NPL). As part of their evaluation, EPA has requested information on tribal use and toxicity exposure from Bradford Island contamination including both current and historic fish/shellfish consumption rates by species.

Bradford Island, North Bonneville, and the surrounding area were occupied by indigenous people since time immemorial and prior to European settlers and the US Government land take-overs. Based on information from the Yakama Nation Cultural Department, the Bradford Island area was historically a federal trust allotment and currently has numerous cultural/archaeological sites on the Island and along the river shorelines (confidentiality applies).

Yakamas historically consumed multiple migratory and resident fish species, as well as shellfish, from Bradford Island, prior to land take-overs by the US government. Suppression of the Tribes' inherent right to fish at traditional sites began in the 1800s; however, the Yakama Nation fought diligently to keep their reserved treaty fishing rights, restore and protect fish populations, and to bring these issues before the public and the courts (2005, The Si'lailo Way: Indians, Salmon and Law on the Columbia river, by Dupris et al.). Today, within the areas of impacted sediments and resident fish, Tribal fish consumption rates by fish/shellfish species are difficult to quantify. Quantification is not the issue, the fundamental matter is that Yakamas treaty rights to fish/shellfish are not limited. Yakamas have always and will continue to fish from the Bonneville Pool.

Currently, the Fort Rains/Bonneville Tribal Treaty Fishing Access Site is located within a half mile of Bradford Island and partially within the In-river Operable Unit of the site (see Figure 1). There are also numerous U&A tribal fishing platforms located within a third of a mile from Bradford Island and within the Bradford Island In-river Operable Unit (Figure 2). Tribal members fish from platforms on the western tip of Goose Island and along the Oregon and Washington shorelines. The lower Bonneville pool tribal

treaty harvests are continuing despite fish advisory warnings, and that includes smallmouth bass being harvested as non-target by-catch in tribal commercial, ceremonial, and subsistence fisheries at Fort Rains Treaty Fishing Access Site and other nearby sites. Because smallmouth bass is not formally managed by any tribes in this area (it is a non-native non-treaty game fish managed by the state agencies) and is not ESA-listed, the tribal commercial or subsistence catch is not recorded or accounted for through the *U.S. v. Oregon* Management Agreement.

A few times in recent years the Yakama Nation authorized fishing for non-salmonid and sturgeon species when catch limits for salmonids/sturgeon had been exceeded. Catfish, bass, walleye and shad were the main non-salmonid species targeted during salmon closures. Tribal members both ate and sold these non-salmonid species.

As you know, fish swim significant distances from where they feed and so fish caught outside of the "Zone of Actual Contamination" (Figure 3) also contain concentrations of Bradford Island contaminants at concentrations orders of magnitude above current human health toxicity criteria. Therefore, we are more concerned about the larger area of contaminated resident fish caught within and potentially beyond the Bradford Island In-river Operable Unit (Figure 4). The cultural and health impacts of contaminated resident fish species on Indian treaty fishing in the Columbia River are enormous because enrolled tribal members traditionally do not waste by-catch caught in gill nets. When fishing for salmon or other fish species by-catch of any type is kept and utilized as the belief is that every fish is a gift from the Creator and Yakama members are taught not to waste these precious resources. Yakama families and individuals are dependent on salmon and other fish and shellfish species including, but not limited to sturgeon, crayfish, and clams/mussels. Between migratory fish runs tribal members may rely on resident fish and shellfish for sustenance. We are concerned that tribal members continue to eat contaminated fish caught in the Bradford Island area, and exposure varies by family, cultural practices, and awareness of contamination issues.

Although a U&A treaty fishing area, enrolled Yakama members are currently prohibited (by tribal regulation) from building fishing platforms on Bradford Island. This decision to issue tribal regulations prohibiting fishing platforms on Bradford Island is a direct result of contamination issues and safety concerns. This decision does not affect other ongoing fishing activities in the vicinity of Bradford Island, within the affected In-River Operable Unit.

In 2013, both the Oregon Health Authority and the Washington Department of Health issued fish consumption advisories for resident fish species in the Columbia River above Bonneville Dam due to elevated levels of mercury and PCBs. Fetuses in utero, nursing babies and small children are most vulnerable to the health effects of these contaminants of concern. Fetuses and babies exposed to high levels of mercury and PCBs can suffer life-long learning and behavior problems. Fishers have been warned not to give resident fish caught from the middle Columbia River to others unless the recipients are aware of where the fish were caught and understand the recommendations in the state fish advisories. Outreach efforts, related to consumption of contaminated fish and shellfish tissue, by the US Army Corps of Engineers (Corps) or others, beyond the health authorities' websites and signage, is lacking. This situation is extremely concerning to the Yakama. Many tribal fishers know very little about this issue, are concerned, and want to know more. Some fishers have stated that they previously sold sturgeon from the Bonneville Pool but no longer do because of concerns about Bradford Island contamination.

Anadromous and resident fish species use the Bradford Island area of the Columbia River for foraging, migration, rearing, spawning, and overwintering habitat. All fish species, adult and juvenile, would be expected to swim in, adjacent to or near the "Zone of Actual Contamination" (Figure 3) identified by the EPA (Ken Marcy email correspondence, February 13, 2020). Several Endangered Species Act (ESA)-listed species are found in the waters surrounding Bradford Island, including their designated critical habitat and essential fish habitat. Table 1 provides a summary of fish species, distribution and life histories expected to be encountered in the Bradford Island area. The information was obtained from the Washington State Department of Fish and Wildlife SalmonScape Mapping Tool and Oregon Department of Fish and Wildlife Compass Mapping Tool at the following weblinks:

- https://apps.wdfw.wa.gov/salmonscape/map.html
- https://compass.dfw.state.or.us/visualize/#x=-120.50&y=44.09&z=7&logo=true&dls%5B%5D=true&dls%5B%5D=0.5&dls%5B%5D=549 &basemap=ESRI+Satellite&tab=data&print=false

With respect to delineation, Yakama Nation has submitted a significant number of comments to the administrative record expressing concerns about the inadequacy of the Corps' Remedial Investigation, Risk Management Decisions, and subsequent investigation efforts to delineate and characterize the site. Therefore, we have low confidence that the "Zone of Actual Contamination" represented in Figure 3, is an accurate or complete representation of where contamination from the Bradford Island facility has come to be located and where risks to ecological and human receptors are present. These data gaps must be addressed.

If you have any questions feel free to contact Laura Shira at 509.985.3561 or shil@yakamafish-nsn.gov.

Regards,

Paul Ward Manager

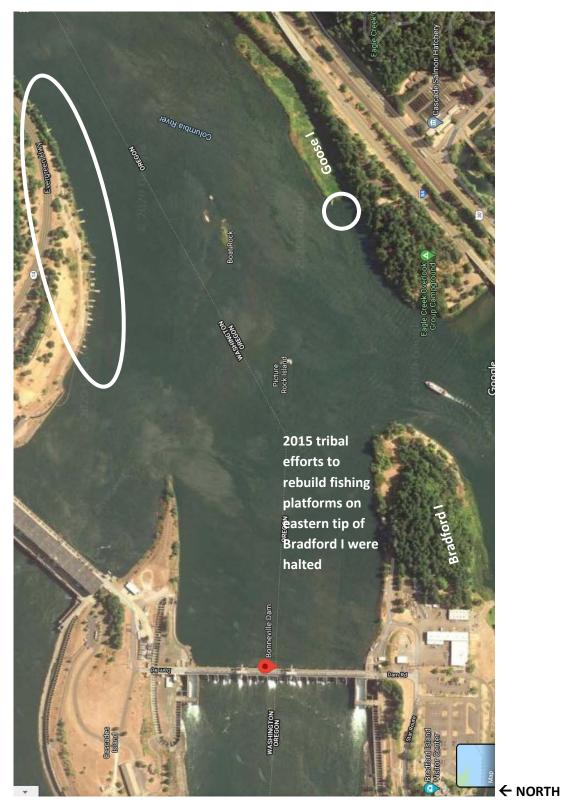
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Figure 1 – Bonneville/Fort Rains Treaty Fishing Access Site and Usual and Accustomed Shoreline Fishing Platforms (within and upstream of the Bradford Island Site In-River Operable Unit)



Google Earth

Figure 2 – Current Usual and Accustomed tribal fishing platforms along WA shoreline and west tip of Goose Island



GoogleMaps

Figure 6 Zone of Actual Contamination and Sediment and Tissue Sample Locations 1004530.F230.001.01\Fig6 Drawn by: SB Date: 2-7-20 BRADFORD ISLAND LANDFILL Cascade Locks, Oregon Pre-FS Sediment and Clam (2011) RI Sediment and Clam (2008) Pre-FS Smallmouth Bass (2011) Spent Sandblast Grit Disposal Area Surface Water Drainage Direction - Catch Basins and Drain Lines Zone of Actual Contamination ecology and servironment, inc.

Figure 3 – EPA's Zone of Contamination Map

2020-02-13 EPA email

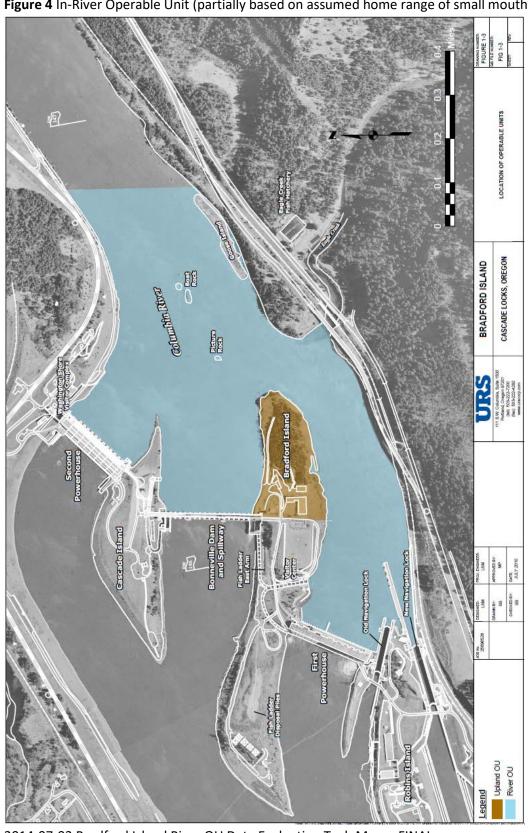


Figure 4 In-River Operable Unit (partially based on assumed home range of small mouth bass)

2014-07-03 Bradford Island River OU Data Evaluation Tech Memo FINAL

Common, Scientific Name,	Federal	State Status	Essential	Designated	Distribution and Life History
and Population	Status		Fish Habitat	Critical Habitat	
(Oncorhynchus nerka)		(Washington)			Migration (adult and juvenile) –
Snake River ESU*					mainstem
Chum salmon	Threatened	Candidate	Υ	Υ	Documented presence, spawning
(Oncorhynchus keta)		(Washington)			and rearing in mainstem.
Lower Columbia River ESU					Documented presence, spawning
					and rearing in Washington
					tributaries (Hardy Creek; Hamilton
					Creek)
Steelhead Trout	Threatened	Candidate	N	Υ	Migration (adult and juvenile) –
(Oncorhynchus mykiss)		(Washington)			mainstem
Lower Columbia DPS**					Spawning, Historical presence in
					upper – Oregon tributaries
					(Moffett Creek; Tanner Creek;
					Eagle Creek)
					Documented presence, spawning,
					rearing – Washington tributaries
					(Hardy Creek; Hamilton Creek).
Steelhead Trout	Threatened	Candidate	N	Υ	Migration (adult and juvenile) –
(Oncorhynchus mykiss)		(Washington)			mainstem
Snake River Basin DPS					
Steelhead Trout	Threatened	Candidate	N	Υ	Migration (adult and juvenile) –
(Oncorhynchus mykiss)		(Washington)			mainstem
Middle Columbia DPS					Spawning, Historical presence in
					upper – Oregon tributaries
					(Moffett Creek; Tanner Creek;
					Eagle Creek)
Steelhead Trout	Threatened	None	N	Υ	Migration (adult and juvenile) –
(Oncorhynchus mykiss)					mainstem
Upper Columbia DPS					
Chinook salmon	Threatened	Threatened	Y	Υ	Migration (adult and juvenile) –
(Oncorhynchus tsawytscha)		(Oregon)			mainstem
Snake River ESU		Candidate			
		(Washington)			

Chinook salmon	Threatened	Candidate	Υ	Υ	Migration (adult and juvenile) –
(Oncorhynchus tsawytscha)		(Washington)			mainstem.
Lower Columbia ESU					Rearing, Spawning, Historical
					presence in upper Oregon
					tributaries (Moffett Creek; Tanner
					Creek; Eagle Creek).
					Documented presence and
					spawning in Washington
					tributaries (Hardy Creek; Hamilton Creek)
Coastal cutthroat trout	Species of	None	N	N	Migration (adult and juvenile) –
(Oncorhynchus clarki clarki)	Concern				mainstem
Coho salmon	Threatened	Endangered	Y	Y	Migration (adult and juvenile) –
(Oncorhynchus kisutch)		(Oregon)			mainstem
Lower Columbia ESU					Spawning, Historical presence in
					upper Oregon tributaries (Moffett
					Creek; Tanner Creek; Eagle Creek)
Pink salmon	None	None	Y	N	Documented presence – odd year
(Oncorhynchus gorbuscha)					run
Pacific lamprey	Species of	None	N	N	Migration (adult and juvenile) –
(Lampropelta tridentata)	Concern				mainstem
					Spawning and rearing in tributaries unknown
Bull Trout	Threatened	Candidate	N	Υ	Forage, Migration, Overwinter
(Salvelinus confluentus)		(Washington)			
White sturgeon	None	None	N	N	Spawning below dam
(Acipenser transmontanus)					Resident, multiple use above dam,
					spawning and rearing
Other fish species including					
ht .a.a.t li.aaita.al ta .a.a.a.a.a					
but not limited to green					
sturgeon, rainbow/redband					
sturgeon, rainbow/redband trout, shad, small mouth					
sturgeon, rainbow/redband					

^{*}Evolutionary Significant Unit **DPS = Distinct Population Segment